DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

99.28 File #:

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-001706 Address: 333 Burma Road **Date Inspected:** 14-Mar-2008

City: Oakland, CA 94607

OSM Arrival Time: 830 **Project Name:** SAS Superstructure Prime Contractor: American Bridge/Fluor Enterprises, a JV **OSM Departure Time:** 1830

Contractor: Japan Steel Works, Ltd. **Location:** Muroran, Japan

CWI Name: Makhmud Ashadi **CWI Present:** Yes No **Inspected CWI report:** Yes No N/A **Rod Oven in Use:** Yes No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A Yes N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** PQR Test Plate, SW-4-1

Summary of Items Observed:

On this date OSM Quality Assurance Representative Daniel L. Reyes observed the casting of the cable saddles, welding of the structural steel components and inspection relative to this project. The following was observed:

At the start of the shift this QA inspector observed the continued welding and inspection of the Procedure Qualification Record (PQR) test plate identified as SW-4-1. The welding was performed by Japan Steel Works, Ltd. welding personnel Ko Payashi ID 08-5023 utilizing the gas shielded Flux Cored Arc Welding (FCAW-G) process as per the Welding Procedure Specification (WPS) SJ-2942 WP-5 which was also used by the Quality Control (QC) Inspector Makhmud Ashadi as a reference. The consumable utilized during the welding of the test plate was identified as a Tri-Mark TM-95K2 with a diameter of 1.6 millimeters manufactured by Hobart Brothers. The QC inspector Mr. Ashadi verified the minimum preheat temperature of 160 degrees Celsius and at the conclusion of verifying the surface temperature the welder Mr. Payashi continued the welding of the fill passes. At this time the QA inspector also observed Mr. Ashadi verify the amperage, voltage and the travel speed. The average welding parameters were observed as follows; 340 amps, 36.5 volts with a travel speed measured at 285mm/m.

Later in the shift this QA inspector observed, at random intervals, the QC inspector Makhmud Ashadi perform the in process weld inspection and verified the following; the minimum preheat temperature, maximum interpass temperature and the DCEP welding parameters. The welding of the Test Plate identified as SW-4-1 was not completed during this shift on this date and appeared to comply with the WPS. (See Digital Photographs)

WELDING INSPECTION REPORT

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Summary of Conversations:

There were general conversations with the Quality Control (QC) Inspector Makhmud Ashadi relative to the Procedure Qualification Record Test and the location of the welding personnel.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Venkatesh Iyer, (858) 967-6363, who represents the Office of Structural Materials for your project.

Inspected By:	Reyes, Danny	Quality Assurance Inspector
Reviewed By:	Brasel,Ron	QA Reviewer